AHRQ Quality Indicators

e-Newsletter

June 2005   **Volume 1, Number 1**

In this issue:

- **Welcome to the Quality Indicators Electronic Newsletter**
- **QI User Support**
- **First Annual QI User Meeting**
- **Free Windows QI Software**
- **USER STORY: Wisconsin Healthcare Organization Uses QIs Several Ways**
- **QI Tips: Using Different Types of QI Rates**

Welcome to the Quality Indicators Electronic Newsletter

Welcome to the first issue of the Agency for Healthcare Research and Quality (AHRQ) Quality Indicators (QI) e-Newsletter. The purpose of our publication is to provide our user community with updates on AHRQ activities related to the QIs, success stories from QI users, and tips on using the QIs. Since this is our first issue, we are eager to hear your comments and suggestions. Are there topics you would like to see included in future issues? Do you have a success story you would like to share with the user community? Please let us know your thoughts by sending an e-mail to support@qualityindicators.ahrq.gov with "Newsletter" in the Subject field.

Return to top

QI User Support

Users with questions related to the AHRQ QIs may contact the support team by sending an e-mail to support@qualityindicators.ahrq.gov or calling toll-free at (888) 512 - 6090. We will respond to all inquiries within 3 business days.

Before contacting the support team we suggest visiting the Frequently Asked Questions page as you may find an immediate answer to your question there.

Return to top

First Annual QI User Meeting

The first annual meeting of AHRQ QI users will be held at AHRQ's John M. Eisenburg building in Rockville MD, in the Fall of 2005. The agenda will focus on the two major uses of the QIs: Quality Improvement and Public Reporting.

[Return to top](#)

Free Windows QI Software

One of the enhancements to the QI software under development is a new PC version that will be independent of 3rd party software that users need to purchase, such as SAS or SPSS. The new software will calculate the QIs for all of the published modules simultaneously, if desired. A software workgroup made up of users from the QI community has been providing guidance and will participate in a Beta test of the software.

When the new software is available, the SPSS versions of the QI software will no longer be updated and supported. The SAS version will continue to be updated and supported.

[Return to top](#)

USER STORY: Wisconsin Healthcare Organization Uses QIs Several Ways

Covenant Healthcare System, Inc. in Milwaukee, WI, reports that they are using the AHRQ QIs in several ways. First, Covenant runs the IQIs and the PSIs on their internal as well as state data. The PSIs are used to identify areas for quality improvement efforts in Covenant's hospitals. Examples of patient safety projects underway include fall reduction, medication error reduction, elimination of dangerous abbreviations, and reducing risks associated with surgery.

Carol Munsch, the Regional Director, Clinical Data Dept. at Covenant, also finds the AHRQ QIs very helpful in preparing to apply for the American Nurses Association Magnet Center status. Applicants for Magnet designation must collect data and report on specific nurse-sensitive quality indicators at the unit level. Although the Association provides a list of indicators, they do not define the indicators. Covenant found it helpful to apply the definitions of AHRQ PSIs and IQIs that overlap the Association's list of indicators.

Covenant Health Care system is part of Wheaton Franciscan Services, the parent organization for health and shelter service organizations sponsored in four states by the Wheaton Franciscan Sisters. Wheaton has selected some

of the PSIs and some of the IQIs to identify opportunities for clinical improvement and process improvement. The AHRQ indicators are consistent and provide a portable way to use measures across the entire region.

[Return to top](#)

QI Tips: Using Different Types of QI Rates

When should you use the observed, expected, risk adjusted, and/or smoothed rates generated by the AHRQ QI software? Here are some guidelines.

If the user's primary interest is to identify cases for further follow-up and quality improvement, then the **observed rate** would help to identify them. _The observed rate is the raw rate generated by the QI software from the data the user provided._ Areas for improvement can be identified by the magnitude of the observed rate compared to available benchmarks and/or by the number of patients impacted.

Additional breakdowns by the default patient characteristics used in stratified rates (e.g., age, gender, or payer) can further identify the target population. Target populations can also be identified by user-defined patient characteristics supplemented to the case/discharge level flags. Trend data can be used to measure change in the rate over time.

Another approach to identify areas to focus on is to compare the observed and **expected rates**. _The expected rate is the rate the provider would have if it performed the same as the reference population given the provider's actual case-mix (e.g., age, gender, DRG, and comorbidity categories)._

If the observed rate is higher than the expected rate (i.e., the ratio of observed/ expected is greater than 1.0, or observed minus expected is positive), then the implication is that the provider performed worse than the reference population for that particular indicator. Users may want to focus on these indicators for quality improvement.

If the observed rate is lower than the expected rate (i.e., the ratio of observed/ expected is less than 1.0, or observed minus expected is negative), then the implication is that the provider performed better than the reference population. Users may want to focus on these indicators for identifying best practices.

Users can also compare the expected rate to the **population rate** reported in the detailed evidence section of the IQI, PQI, or PSI Guide to determine how their case-mix compares to the reference population. If the population rate is higher than the expected rate, then the provider's case-mix is less severe than the reference population. If the population rate is lower than the expected rate, then the provider's case-mix is more severe than the reference population.

We use this difference between the population rate and the expected rate to "adjust" the observed rate to account for the difference between the case-mix

of the reference population and the provider's case-mix. This is the provider's **risk-adjusted rate**.

If the provider has a less severe case-mix, then the adjustment is positive (population rate > expected rate) and the risk-adjusted rate is higher than the observed rate. If the provider has a more severe case-mix, then the adjustment is negative (population rate < expected rate) and the risk-adjusted rate is lower than the observed rate. *The risk-adjusted rate is the rate the provider would have if it had the same case-mix as the reference population given the provider's actual performance.*

Finally, users can compare the risk-adjusted rate to the **smoothed** or "reliability-adjusted" rate to determine whether this difference between the risk-adjusted rate and reference population rate is likely to remain in the next measurement period. *Smoothed rates are weighted averages of the population rate and the risk-adjusted rate, where the weight reflects the reliability of the provider's risk-adjusted rate.*

A ratio of (smoothed rate - population rate) / (risk-adjusted rate - population rate) greater than 0.80 suggests that the difference is likely to persist (whether the difference is positive or negative). A ratio less than 0.80 suggests that the difference may be due in part to random differences in patient characteristics (patient characteristics that are not observed and controlled for in the risk-adjustment model). In general, users may want to focus on areas where the differences are more likely to persist.

[Return to top](#)

Contact us:

(888) 512-6090

Links:

Quality Indicators Web Site

AHRQ Web Site

HCUP Web Site

The support e-mail address for the Quality Indicators is support@qualityindicators.ahrq.gov.

To subscribe to the Quality Indicators Listserv, go to http://www.qualityindicators.ahrq.gov/signup.htm and follow the directions. The purpose of the Quality Indicators (QIs) LISTSERV® is to inform interested parties of modifications and enhancements to the QIs or other information related to the AHRQ QIs.